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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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HOFFMAN WARNICK & D'ALESSANDRO, LLC			PERILLA, JASON M	
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ALBANY, NY 12207			PAPER NUMBER	

2634

DATE MAILED: 03/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/855,456	CHENG, TING DEAN	
	Examiner	Art Unit	
	Jason M Perilla	2634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,7-17 and 19-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,7-17 and 19-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-5, 7-17 and 19-24 are pending in the instant application.

Response to Arguments/Amendments

2. The rejection of claims 6 and 7 under 35 USC § 112 first paragraph as applied in the first office action have been withdrawn after further consideration by the Examiner. It has been found that the claimed subject matter of claims 6 and 7 is properly enabled and disclosed by the specification as originally filed.
3. Applicant's arguments filed November 2, 2004 have been fully considered but they are not persuasive.

Regarding the Applicant's argument for the allowability of claim 1 as amended to include "a security system for changing the predetermined clock frequency to a predetermined sequence of frequencies", the argument is not persuasive. The Applicant asserts that the use of a frequency hopping spread spectrum system in the communications system of Takechi et al (Patent Application Publication of Japan 2000-174685; hereafter Takechi) is not motivated according to the teachings of Gibson (Gibson, Jerry D; "The Communications Handbook") as applied to claim 6 of the first office action. However, the Examiner insists that the combination of Takechi in view of Gibson is proper.

The three basic criteria for a *prima facie* case of obviousness related by the Applicant are met in the combination. Gibson provides motivation for the use of a frequency hopping carrier frequency in a communications system by teaching that the frequency hopping spread spectrum system *provides a secure transmission*. Although

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the Applicant may feel that the teaching is general, it is nonetheless applicable, and one skilled in the art is plainly aware of the security benefit provided by a frequency hopping communications system. Further, the Examiner notes that the secure frequency hopping communications system of the instant application is itself general. While the Applicant may feel that the Examiner has applied a general teaching to a specific case, the communications system of the instant application is general. Indeed, the use of a secure frequency hopping system is applicable and obvious in many systems and the claimed subject matter of the instant application does not claim frequency hopping in a particular or novel manner which would be considered unique to one having ordinary skill in the art.

The Applicant suggests that the combination of Takechi in view of Gibson has no reasonable expectation of success by presenting that Takechi attempts to eliminate distortion while Gibson creates distortion. However, the "distortion" introduced by Gibson alleged by the Applicant is exclusive to the scope of any distortion reduced by the system of Takechi. That is, the distortion removed by Takechi is caused by a different reason than any alleged distortion created by the teachings of Gibson. Therefore, one skilled in the art would not feel that the teachings of Gibson reduce any benefits provided by the system of Takechi and would still be motivated to combine. Furthermore and foremost, the alleged "distortion" cited by the Applicant is actually not distortion at all. Rather, the Applicant erroneously equates the challenges of aligning the phase of the hopping carrier at the side of a receiver as distortion although it is fundamentally not distortion in the sense in which it is used by the Applicant.

Finally, the Applicant purports that the combination of Takechi in view of Gibson fails to meet all of the claim limitations but neglects to detail any reasons why. The claim limitations of claim 1 are met by Takechi in view of Gibson as clearly applied below.

The Applicant traverses the combination of Takechi in view of Russo as applied to claim 24 in the first office action and simply states that the combination is not properly motivated. Again, the Examiner insists that the combination is properly applied as detailed below.

Regarding the machine translation of the reference Takechi and the Applicant's suggestion that it is insufficient in clarity to interpret, the Examiner has clearly set forth as noted in the translation how each claim limitation has been met accordingly. The translation is a direct machine translation and is more than sufficient, along with the illustrations, to detail the claimed limitations of the instant application. The translation is certainly definite although it may contain idiomatic errors.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 10, 12, 13, 19-21 and 23 are rejected under 35 U.S.C. 102(a) as being anticipated by Takechi et al (Patent Application Publication of Japan 2000-174685; hereafter "Takechi").

Regarding claim 10, Takechi discloses a communication device for receiving data encoded at a predetermined frequency (abstract; solution), comprising a global positioning system (GPS) receiver (fig. 1, ref. 17) for receiving a carrier signal (para. 0001) and a signal processing system (fig. 1, refs. 11, 12, 13, 14, 15, and 16) for decoding the data using a clock signal (fig. 1, output of reference 20) at the predetermined frequency, wherein the clock signal of the device is derived directly from the carrier signal (para. 0029). Further, Takechi discloses that the signal which should be decoded is apart from that of the GPS data (para. 0008 and 0021, "the data to be transmitted"). The communications system of Takechi does not utilize any data from the GPS satellite signal. Rather, it makes use of the precise carrier signal.

Regarding claim 12, Takechi discloses the limitations of claim 10 as applied above. Further, Takechi discloses that the encoded data comprises wireless data (fig. 1, ref. 10).

Regarding claim 13, Takechi discloses the limitations of claim 10 as applied above. Further, Takechi discloses a transmitter (fig. 2) that includes a system for encoding data (fig. 2, ref. 36) using an encoder clock signal derived from the carrier signal (fig. 2, ref. 34).

Regarding claim 19, Takechi discloses a method of synchronizing a pair of communication devices, comprising the steps of: receiving a global positioning system (GPS) carrier (fig. 2, ref. 34) signal at a first device (fig. 2); at the first device, deriving from the carrier signal a transmitter clock signal having a predetermined frequency (para. 0008); transmitting data at the predetermined frequency from the first device

(para. 0008; fig. 2, ref. 33); receiving the data at a second device (fig. 1, ref. 10); receiving the GPS carrier signal at the second device (fig. 2, ref. 17); and at the second device, deriving from the carrier signal a receiver clock signal having the predetermined frequency (para. 0009, 0021 and 0022).

Regarding claim 20, Takechi discloses the limitations of claim 19 as applied above. Further, Takechi discloses the further step of synchronizing the received data using the receiver clock signal. The disclosure of Takechi clearly relates to the synchronization of the carrier signal and internal encoding clock signal of a communications system to that of a GPS signal carrier. In the receiver embodiment of figure 1, it is inherent that the received data is synchronized to the receiver clock signal for the received data to be interpreted.

Regarding claim 21, Takechi discloses the limitations of claim 19 as applied above. Further, Takechi discloses that the transmitter clock signal and the receiver clock signal are derived from the carrier signal using a common formula. Figures 3 and 4 of Takechi disclose the standard frequency signal generator (para. 0029) which outputs the standard frequency signal according to the GPS carrier signal in both the transmitter (fig. 2, ref. 34) and receiver (fig. 1, ref. 17). Hence, the transmitter clock signal and the receiver clock signal are derived from the carrier signal using a "common formula".

Regarding claim 23, Takechi discloses the limitations of claim 19 as applied above. Further, Takechi discloses that the data is transmitted via a wireless communication channel (fig. 1, ref. 10; fig. 2, ref. 33).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 2, 5, 7-9, 14-17 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takechi in view of Gibson (Gibson, Jerry D; "The Communications Handbook").

Regarding claim 1, Takechi discloses a communication system for facilitating remote communications (abstract; solution), comprising a first device (fig. 2) having: a first global positioning system (GPS) receiver (fig. 2, ref. 34; fig. 3, ref. 100) for receiving a carrier signal (para. 0001); wherein the clock signal of the device is derived directly from the carrier signal (para. 0029); and a data transmitter (fig. 2, refs. 32, 33) for transmitting data (para. 0008). Takechi discloses a communications system wherein both a receiver (fig. 1) and a transmitter (fig. 2) of the communications system are synchronized to a carrier of a global positioning satellite (GPS) signal (fig. 1, ref. 17; fig. 2, ref. 34; para. 0014). Thereby, the transmitter and the receiver may both be in very close synchronization due to the very small tolerance of the carrier signal of the GPS signal (para. 0014). Takechi further discloses that the data is PN encoded according to the clock signal generated by the clock signal synchronization and generator circuit (para. 0021; fig. 2, ref. 36) in the PSK modulation system (para. 0028). The disclosure of Takechi clearly relates to the synchronization of the carrier signal of a

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communications system to that of a GPS signal carrier. Additionally, it is accepted in the art that in a frequency shift keying system (i.e. PSK) the data to be transmitted must be bit synchronized (encoded, decoded, modulated, demodulated) in close relation to the carrier of the signal for utility of the communications system. Therefore, the transmission carrier of the communications system disclosed by Takechi as well as the encoding clock are both directly synchronized to the GPS carrier. Indeed, the standard frequency generator of the transmitter (fig. 2, ref. 34) is used both by the PN encoder (fig. 2, ref. 36) as well as the frequency converter or modulator (fig. 2, ref. 32). Takechi does not disclose that the signal encoder system includes a first security system for changing the predetermined clock frequency to a predetermined sequence of frequencies. However, Gibson teaches a frequency hopping spread spectrum system (pgs. 202, 203) wherein a clock or carrier frequency of both the transmitter and receiver are varied (pg. 202, line 15; "pseudorandom frequency shifts") to create a secure transmission (pg. 199; section 16.1). The frequency shifts are called pseudorandom because they are difficult to track and hence secure being predetermined only by the communications system. The use of frequency hopping spread spectrum is well known in the art for the creation of a secure transmission system. Therefore, it would have been obvious to one having ordinary skill in the art at the time which the invention was made to utilize frequency hopping spread spectrum as taught by Gibson in the communications system of Takechi because it would create a secure transmission system by varying the frequency of the communications carrier frequency.

Regarding claim 2, Takechi in view of Gibson disclose the limitations of claim 1 as applied above. Further, Takechi discloses a second device (fig. 1) having: a second GPS receiver (fig. 1, ref. 17) for receiving the carrier signal; a data receiver (fig. 1, refs. 10 and 11) for receiving the encoded data from the transmitter; and a signal decoder (fig. 1, ref. 14; para. 0009; "sorting means to sort out") system for decoding the encoded data using a second clock signal at the predetermined clock frequency (para. 0009, "using said carrier signal"), wherein the second clock signal is derived directly from the carrier signal received from the second GPS receiver (fig. 1, ref. 17; para. 0009 and 0015). The standard frequency generator of the receiver (fig. 1, ref. 17) is used both by the PN decoder (fig. 1, ref. 22) as well as the frequency converter or demodulator (fig. 1, ref. 11).

Regarding claim 5, Takechi in view of Gibson disclose the limitations of claim 1 as applied above. Further, Takechi discloses that the encoder system derives the first clock signal by modulating the carrier signal to an intermediate signal (fig. 3, refs. 43 and 45; para. 0029).

Regarding claim 7, Takechi in view of Gibson discloses the limitations of claim 2 as applied above. Further, Gibson teaches a frequency hopping spread spectrum system (pgs. 202, 203) wherein a clock or carrier frequency of both the transmitter and receiver are varied (pg. 202, line 15; "pseudorandom frequency shifts") to create a secure transmission (pg. 199; section 16.1). The frequency shifts are called pseudorandom because they are difficult to track and hence secure being predetermined only by the communications system. The use of frequency hopping

spread spectrum is well known in the art for the creation of a secure transmission system. Therefore, it would have been obvious to one having ordinary skill in the art at the time which the invention was made to utilize frequency hopping spread spectrum as taught by Gibson in the communications system of Takechi because it would create a secure transmission system by varying the frequency of the communications carrier frequency.

Regarding claims 8 and 9, Takechi in view of Gibson disclose the limitations of claim 2 as applied above. Takechi does not explicitly disclose the communications system operating in a synchronous or asynchronous manner. However, the use of synchronous and asynchronous methods of communication are well known in the art as disclosed by Gibson (pg. 612, lines 31-40). Although the teachings of Gibson are applied in reference to a local area network, they are unequivocally applicable to any communications system. The techniques of synchronous and asynchronous communications are well known in the art and do not provide a novel limitation to the claim.

Regarding claim 14, Takechi discloses a method for synchronizing signals in a communication system (para. 0001 and 0002), comprising the steps of: receiving a global positioning system (GPS) carrier signal (fig. 3); generating a clock signal derived from the carrier signal (fig. 1, ref. 17 – receiver or fig. 2, ref. 34 – transmitter); and PN encoding/decoding or synchronizing (para. 0021 – encoding or 0027 - decoding) a non-GPS data stream with the clock signal. Takechi discloses in paragraph 8 that the communications system has “a carrier signal generation means to generate a carrier

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(fig. 2, ref. 34) ... based on the signal received from the satellite". Takechi discloses that the data is PN encoded/decoded according to the clock signal generated by the clock signal synchronization and generator circuit (fig. 1, ref. 17; fig. 2, ref. 36) in the PSK modulation system (para. 0028). The disclosure of Takechi clearly relates to the synchronization of the carrier signal of a communications system to that of a GPS signal carrier. Additionally, it is accepted in the art that in a frequency shift keying system (i.e. PSK) the data to be transmitted must be bit synchronized (encoded, decoded, modulated, demodulated) in close relation to the carrier of the signal for utility of the communications system. Therefore, the transmission carrier of the communications system disclosed by Takechi as well as the encoding clock are both directly synchronized to the GPS carrier. Indeed, the standard frequency generator of the transmitter (fig. 2, ref. 34) is used both by the PN encoder (fig. 2, ref. 36) as well as the frequency converter or modulator (fig. 2, ref. 32). Takechi does not disclose that the method for synchronizing a communications system includes periodically changing the frequency of the clock signal. However, Gibson teaches a frequency hopping spread spectrum system (pgs. 202, 203) wherein a clock or carrier frequency of both the transmitter and receiver are periodically varied (pg. 202, line 15; "pseudorandom frequency shifts") to create a secure transmission (pg. 199; section 16.1). The frequency shifts are called pseudorandom because they are difficult to track and hence secure being predetermined only by the communications system. The use of frequency hopping spread spectrum is well known in the art for the creation of a secure transmission system. Therefore, it would have been obvious to one having ordinary skill

in the art at the time which the invention was made to utilize frequency hopping spread spectrum as taught by Gibson in the communications method of Takechi because it would create a secure transmission system by varying the frequency of the communications carrier frequency.

Regarding claim 15, Takechi in view of Gibson disclose the limitations of claim 14 as applied above. Further, the clock signal is necessarily generated at a predetermined frequency because the GPS carrier signal has a predetermined frequency.

Regarding claim 16, Takechi in view of Gibson disclose the limitations of claim 14 as applied above. Further, Takechi discloses the further step of transmitting the non-GPS data stream at the frequency of the clock signal (fig. 2, refs. 34, 37, and 32).

Regarding claim 17, Takechi in view of Gibson disclose the limitations of claim 14 as applied above. Further, in the case that the embodiment of claim 14 is a receiver (fig. 1), Takechi discloses that the non-GPS data stream was received from a remote transmitter (fig. 2) also operating at the frequency of the clock signal.

Regarding claim 22, Takechi discloses the limitations of claim 19 as applied above. Takechi does not disclose the method further comprising the step of systematically altering the frequency of the transmitter clock signal and the receiver clock signal using a predefined scheme. However, Gibson teaches a frequency hopping spread spectrum system (pgs. 202, 203) wherein a clock or carrier frequency of both the transmitter and receiver are systematically altered (pg. 202, line 15; "pseudorandom frequency shifts") to create a secure transmission (pg. 199; section 16.1). The frequency shifts are called pseudorandom because they are difficult to track and hence secure being

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predetermined only by the communications system. The use of frequency hopping spread spectrum is well known in the art for the creation of a secure transmission system. Therefore, it would have been obvious to one having ordinary skill in the art at the time which the invention was made to systematically alter the frequency of the receiver and transmitter clock signals to create a frequency hopping spread spectrum system as taught by Gibson in the communications system of Takechi because it would create a secure transmission system by varying the frequency of the communications carrier frequency.

Regarding claim 22, Takechi discloses the limitations of claim 19 as applied above. Takechi does not disclose the method further comprising the step of systematically altering the frequency of the transmitter clock signal and the receiver clock signal using a predefined scheme. However, Gibson teaches a frequency hopping spread spectrum system (pgs. 202, 203) wherein a clock or carrier frequency of both the transmitter and receiver are systematically altered (pg. 202, line 15; "pseudorandom frequency shifts") to create a secure transmission (pg. 199; section 16.1). The frequency shifts are called pseudorandom because they are difficult to track and hence secure being predetermined only by the communications system. The use of frequency hopping spread spectrum is well known in the art for the creation of a secure transmission system. Therefore, it would have been obvious to one having ordinary skill in the art at the time which the invention was made to systematically alter the frequency of the receiver and transmitter clock signals to create a frequency hopping spread spectrum system as taught by Gibson in the communications system of

Takechi because it would create a secure transmission system by varying the frequency of the communications carrier frequency.

8. Claims 3, 4, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takechi in view of Gibson, and in further view of Murphy (US 6009335).

Regarding claims 3 and 4, Takechi in view of Gibson disclose the limitations of claim 1 as applied above. Takechi in view of Gibson disclose a communications system wherein a transmitter and a receiver are synchronized by the same GPS carrier system. Takechi in view of Gibson do not explicitly disclose that the GPS carrier signal is one of a L1 or L2 signal. However, Murphy teaches the accuracy of the carrier signals of the L1 and L2 signals used by the GPS satellites (col. 1, lines 23-35). The accuracy of the L1 and L2 carrier signals cause them to be exemplary carrier signals for synchronization. Therefore, it would have been obvious to one having ordinary skill in the art at the time which the invention was made to synchronize the communications system of Takechi in view of Gibson to one of the L1 or L2 carrier signals of the GPS satellite as taught by Murphy because they are the two carrier signals transmitted by the GPS satellite having exemplary accuracy.

Regarding claim 11, Takechi in view of Gibson disclose the limitations of claim 10 as applied above. Further, Murphy discloses the additional limitations of claim 11 as applied to claims 3 and 4 above.

9. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takechi in view of Russo (US 6167078).

Regarding claim 24, Takechi discloses a communication device for processing data (fig. 1, ref. 14), comprising: a global positioning system (GPS) receiver (fig. 1, ref. 17) for receiving a carrier signal; a signal processing system for converting the carrier signal to a clock signal at a predetermined frequency (para. 0010). Takechi does not disclose a universal asynchronous receiver/transmitter (UART), wherein the UART utilizes the clock signal obtained from the signal processing system to provide communications with another communications device. However, Rosso teaches the use of a transmit and receive UART (fig. 4, refs. "Tx UART", 44) which utilizes a PLL clock signal (col. 1, lines 19-20) to provide communications to another communications device (fig. 4, ref. 10). One skilled in the art is familiar with the advantages of using standard UART devices in asynchronous communication. Asynchronous communication is well known in the art, and universal asynchronous transmit and receive units as taught by Rosso are commonly utilized in communications systems. Therefore, as broadly as claimed, it would have been obvious to one having ordinary skill in the art at the time which the invention was made to utilize a UART in the communication device of Takechi as taught by Rosso to communicate to another communications device because it is commonly utilized in the art to implement asynchronous communications among a system which is synchronized according to a predetermined clock frequency.

Allowable Subject Matter

10. No claims are allowed.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M Perilla whose telephone number is (571) 272-3055. The examiner can normally be reached on M-F 8-5 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on (571) 272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

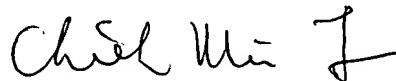
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jason M. Perilla
March 23, 2005

jmp



CHIEH M. FAN
PRIMARY EXAMINER